Visioneering® Specification: -/120/- Glazing

PERFORMANCE REQUIREMENT:

The Visioneering® -/120/- glazing system shall be supplied and installed in accordance with the building code requirements under NCC2022 C3D8 (NCC2019 C2.7) and Specification S5 (NCC2019 Spec C1.1) for fire rated walls or openings in fire rated wall and achieve an FRL of -/120/- in accordance with AS1530.4:2014.

Any Visioneering® Glazed Door System shall be installed in accordance with NCC2022 C4D6 (NCC2019 C3.5) requirements and AS1905.1:2015 achieving an FRL of -/120/-. Both systems shall also be installed in accordance with Smoke Control's (manufacturer) recommendations.

Note: The Visioneering® -/120/-glazing systems are non-load bearing. Surrounding structure should be designed to carry any required supporting loads. Structural adequacy with respect to FRL is not required for the glazed system in accordance with NCC2022 S1C6 (NCC 2019 Schedule 5 – Clause 6).

RADIATION DATA	
Time	**Radiant Heat Flux (kW/m^2) measured at 1m**
30 minutes	1.8
60 minutes	5
90 minutes	9
120 minutes	14

FIXED PANEL		
Characteristic	**Internal (SGU)**	**External (DGU)**
Glass thickness (nominal)	14 to 20mm (height dependant)	32 to 34mm (height dependant)
Sound Reduction (Rw glass only, EN140-3)	38 (-1, -2) dB	39 (-2, -6) dB
Light Transmission (EN410)	86 to 84%	79 to 77%
U-value (glass only, EN673)	5.0 W/m^{2}K	1.1 W/m^{2}K
SHGC (G value, EN410)	0.72 to 0.61	0.52 to 0.49

DOOR		
Characteristic	**Internal (SGU)**	**External (DGU)**
Glass thickness (nominal)	14 to 20mm (height dependant)	32 to 34mm (height dependant)
Sound Reduction (Rw glass only, EN140-3)	38 (-1, -2) dB	39 (-2, -6) dB
Light Transmission (EN410)	86 to 84%	79 to 77%
U-value (glass only, EN673)	5.0 W/m^{2}K	1.1 W/m^{2}K
SHGC (G value, EN410)	0.72 to 0.61	0.52 to 0.49

PRODUCT SPECIFIED

Proprietary System: Visioneering® -/120/- Glazing System by Smoke Control T: 1300 665 471; info@smokecontrol.com.au

The system consists of a propriety cold formed and seam welded steel profile, incorporating beading with concealed fixing and clear Class A safety Glass:

System parameters:

a) Fire Performance
    i) Fixed and lights:
        i. Internal application; -/120/-, Glass Contraflam lite 120

ii. External application; -/120/-, Glass Contraflam lite 120 Climaplus

ii) Door (both single and double):

i. Internal application; -/120/-, Glass Contraflam lite 120

ii. External application; -/120/-, Glass Contraflam lite 120 Climaplus

b) Maximum sizes:

i) Fixed (-/120/-)

i. Single window – 3000mm H x 1500mm W

ii. Partition – up to 4m height and unlimited width appropriate expansion joints and mullions

ii) Door (-/120/-)

i. Single Door – 2700mm H x 1450mm W

ii. Double Door – 2700mm H x 1450mm W per leaf (total 2950mm W)

iii) Lights (-/120/-)

i. Top light – total system height up to 4m

ii. Side lights - up to 4m height and unlimited width appropriate expansion joints and mullions

c) Dimensions Frame Profile

i) Fixed and lights:

i. Internal application – 50mm deep x 70mm wide

ii. External application – 50mm deep x 70mm wide

ii) Door frame (both single and double):

i. Internal application – 50mm deep x 70mm wide

ii. External application – 50mm deep x 70mm wide

iii) Door leaf (both single and double):

i. Internal application – 50mm deep x 70mm wide

ii. External application – 50mm deep x 70mm wide

d) Framing types:

i) Galvanised (standard)

ii) Stainless steel (optional)

e) Supporting construction type:

i) Masonry

ii) Concrete

iii) Fire rated plasterboard with steel or timber stud

f) Door Hardware:

i) Lock – Proprietary Mortice

ii) Handle – Kaba N602 & N601 series

iii) Closer

i. Single leaf – Dorma TS93

ii. Double leaf – Dorma TS93 GSR

g) Gasketing – Smoke Control proprietary integrated black rubber gasket

h) System Weight:

i) Fixed glazing:

i. Internal; Nominally 46 kg/m^2

ii. External; Nominally 61kg/m^2

ii) Door; 2400mm H x 1200mm W; Nominally 180kg

i) Powder coating: Standard range Dulux Duralloy Colours. Other colour ranges available on request.

Ancillary items required:

j) Maintenance: All Visioneering® systems shall be maintained by competent technicians in accordance with AS1851 and the manufacturers recommendations

k) Safety decals: These can be installed external on the glazing in accordance with EN testing or can be factory etched internally into the glass assembly.

l) Radiation shielding: Additional protective layers to be integrated into the glass assembly to provide EMF / Xray / Ionizing radiation shielding. As per agreed performance specification.

m) Tinting and visibility control: Glass shall include translucent privacy film or tinted DGU.

n) Electronic hold open: Integrated 24v DC magnetic hold open is available in the door closer mechanism, alarm signal by others. Must be installed with a physical door stop (by others) to prevent door over swinging and damaging integrated hold open device.

APPLICATIONS

- Fire walls in accordance with NCC2022 C3D8 (NCC2019 C2.7) and Specification S5 (NCC2019 Spec C1.1)
- Non-required stairways, ramps, and escalators in accordance with NCC2022 D2D17 & Specification 14 (NCC2019 D1.12 & Spec D1.12)
- Openings in fire walls in accordance with NCC2022 C3D8 and Specification S5 (NCC2019 C2.7 & Spec C1.1)

Note: Some applications listed above may require a Performance Solution to be compliant. Please check with your Certifier prior to specifying this product.

INSTALLATION

The Visioneering® glazing systems shall be installed, certified, commissioned and tagged in accordance with AS1905.1:2015 and Smoke Control (manufacturer) instructions by an ISO9001 Quality, ISO18001 WHS and ISO14001 Environment Accredited manufacturer.

Glazed Partitions
The glazed partition shall be installed into a fire rated wall structure of a type listed in System Parameters Clause e) of this document. The FRL of the wall shall be at least -/120/120 when tested in accordance with AS1530.4. Appropriate expansion gaps shall be included between the glazed partition and the wall structure and approved fire rated mastic and/or silicone shall be applied to this gap.

Glazed fire doors
Clearances between the bottom of the glazed door leaf and the floor shall be in accordance with AS1905.1:2015 - Clause 5.5.1. and as follows:

(a) Between the leaf and the top surface of the floor including any floor covering – not less than 3mm and not more than 10mm.
(b) Between the leaf and the top of the non- combustible threshold – not more than 25mm.

Any floor coverings across the threshold should be in accordance with AS1905.1:2015 – Clause 5.5.1. Certification these floor coverings is by others.

COMMISSIONING

Glazed Partitions
Once installed it shall be demonstrated that the glazing system includes the appropriate markings in the bottom of each glazed panel indicating glass model and toughening standard.

Glazed Fire Doors
AS1905.1:2015 commissioning testing shall be conducted to verify opening forces and the results recorded on the commissioning certificate provided in an applicable Operations and Maintenance Manual or equivalent report. The glazed fire door systems shall be then tagged with appropriate compliant tag in accordance with AS1905.1:2015.

Certificates of Compliance shall be issued by the sub-contractor in accordance with National Construction Code A2.2.

All details and approvals are current as of the date displayed. This document supersedes all previous versions.